

VERMONT DEPARTMENT OF PUBLIC SERVICE REQUEST FOR PROPOSALS

INTRODUCTION

The Vermont Department of Public Service ("Department" or "DPS"), which represents the public in utility cases before the Vermont Public Service Board ("Board" or "PSB"), is seeking expert consultant assistance to evaluate the costs and benefits of advanced metering infrastructure ("smart metering") and the increased use of advanced time-based rates as they relate to smart metering. In addition, the DPS seeks valuation of the potential promulgation of standards and requirements with respect to "smart metering" and advanced time-based rates.¹ The consulting services solicited are in relation to the opening of a Docket by the Board investigating smart metering and time-based rates. The investigation was opened following a request by the Department that the Board consider the above matters, which are described more fully below.

The Department prefers responses encompassing the entire scope of services; however consideration will be given to bids on specific deliverable tasks. The selected contractor should be available to start immediately. **Proposals are due by 4:00 P.M. on June 18, 2007.** One hard copy and an electronic copy of the proposal must be delivered to the Department of Public Service.

Questions concerning and responses to this request for proposals should be directed to:

Riley Allen or TJ Poor
Vermont Department of Public Service
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Montpelier, VT 05620-2601
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BACKGROUND

Vermont has 20 vertically integrated electric distribution utilities that operate within a fully regulated environment: Two relatively large investor-owned utilities, one smaller investor-owned utility, 15 municipal utilities and two cooperative utilities. There is one bulk transmission company that is wholly owned by these utilities. One of Vermont's two largest utilities operates in an alternative regulation framework and the other large investor-owned utility is expected to petition the Public Service Board to adopt an alternative regulation framework. More background and information on Vermont utilities and the regulatory and operating environment

¹ The precise definitions of "advanced metering infrastructure," "smart meters," and the associated "advanced time-based pricing" are subjects of this request for proposals. However, for purposes of this investigation, we expect that advanced metering equipment will include meters and ancillary devices capable, at a minimum, of two-way communications, and that advanced rate designs will include critical peak pricing and the so-called real-time pricing. We wish to include within the ambit of definitions the closely related issues of open standards for ancillary equipment and devices necessary to empower end-users to effectively respond to price signals enabled through the advanced meters and ancillary devices.

can be found through the Department's [2005 Twenty-Year Electric Plan](#), the [Draft Update to that Plan](#), and [Utility Facts](#).²

Vermont's distribution utilities have a tradition of heavy reliance on time-of-use ("TOU") pricing. Roughly half of the state's electricity load (6500 GWh) is currently served under some form of a time-based rate. Time differentiated rates are available in some form to most electric ratepayers in Vermont. Vermont enjoys one of the best load factors in New England. One utility in Vermont is also into an advanced stage of deploying advanced meter infrastructure technology, although no specific plans have been proposed to the Board for creating an advanced time-based rate that could be enabled through advanced metering technology. Also, at least two other Vermont electric distribution utilities are at some stage of deploying automatic meter reading infrastructure.

Despite the progress to date with traditional TOU rates and advanced metering equipment, the Department of Public Service believes that additional opportunities may exist for further improvements to service and reductions in ratepayer costs through advanced metering and advanced time-of-use pricing enabled through such metering devices.

Procedural History

In 2005, the Energy Policy Act (EPACT) called for state public utilities commissions to consider the adoption of a set of five standards. One of these standards was in relation to "smart meters" and time-based rates. Written comments were solicited by the Board, and a workshop was held, leading to the Board determination against adoption of EPACT's offered standards, based on the unique characteristics Vermont's utilities. Following this determination, the DPS submitted comments suggesting more workshops and additional process. The procedural history of these workshops and comments of the DPS and utilities can be found through the Public Service Board's [website](#).³

The workshops led the DPS to believe that the issue should be analyzed in greater depth.

In April of 2007 the DPS submitted a petition to the Board to request a formal investigation to evaluate the use of smart metering and increased time-based rates. In its petition before the Board,⁴ the Department has stated:

- The use of "smart" metering equipment and the use of rates have the potential to provide numerous important benefits to Vermont electric consumers and utilities, including but not limited to sending more accurate price signals, load shifting, reduction in energy use, reduced meter reading costs, and improved customer service.
- Experience in other jurisdictions suggests that reductions in demand from pricing plans enabled through advanced time-of-use meters generally correspond to peak periods when both utility costs and energy emissions are high.

² These Documents are available selecting the hyperlinks provided, or through the DPS website, at <http://publicservice.vermont.gov/>

³ <http://www.state.vt.us/psb/document/ElectricInitiatives/ImplementFEPA2005.htm>

⁴ The complete petition can be found as Attachment B to this document.

- Potential benefits of “smart metering” also include more and better information about customer resource requirements for utility planners and the flow of that information to the final customer
- Some Vermont utilities are deploying Advanced Meter Reading (AMR) technologies. However, Advanced Meter Infrastructure holds more potential for overall value to ratepayers. Early deployment of AMR may undercut important ratepayer benefits from AMI technologies.

The request was granted; the Board opened Docket 7307 on April 18, 2007.

In parallel to Board workshops and activities related to this investigation, the Vermont General Assembly has moved forward with legislation embracing both a formal Board investigation into advanced meter infrastructure and advanced time-of-use pricing. The legislative proposal also includes language proposing that the Board include consideration of inclining block electric rates in their investigation.⁵ In the Board’s opening order, the Board allowed flexibility to consider both issues together in the context of this investigation.

The services provided as a result of this RFP will inform this proceeding.

SCOPE OF SERVICES AND WORK PRODUCT

The selected contractor will evaluate the costs and benefits of advanced time-of-use metering; the increased use of advanced time-based rates enabled through such metering devices; and potential standards and requirements on electric utilities of the same. Considerations in the study shall include but not be limited to impacts to utility costs, impacts to consumers, opportunities for improvements in utility service delivery, and opportunities for reduction in peak demand and energy consumption. The analysis should enable consideration of all costs and benefits from both the utility cost perspective and the total resource cost or societal cost perspective.⁶ Recommendations for deployment of AMI, rate design enabled through AMI, and consideration in planning, and other requests shall be provided as described below. The study will inform the Board’s decisions concerning the expected investigation and shall specifically include:

- 1) A Statewide analysis of all costs and benefits of installing Advanced Metering Infrastructure (AMI) and an analysis of the costs and benefits of advanced time-based rates enabled by AMI; this analysis should include the following:
 - a. An assessment of AMI technology including definitions, minimum standards for implementation and functionality, and a description of the key technology features.
 - b. The potential benefits and costs associated with AMI technology with respect to enabling advanced time-based rates that have the effect of encouraging users to control, reduce, or shift load.

⁵ See House Bill 520 at www.leg.state.vt.us

⁶ These are three of five tests commonly used in Vermont and elsewhere to complete cost-benefit analyses. The Utility Cost Test measures the net costs incurred by the utility (excluding those of the participant, in this case the energy consumer), measured against benefits accrued to the utility. The Total Resource Cost Test measures the net costs of the option based on the total costs of the program, including both the participant’s and utility’s costs. The Societal Test used in Vermont represents a total resource cost test with externalities accounted for in the analysis.

- c. An assessment of opportunities for savings and/or enhancement of utility service delivery enabled by AMI, including but not limited to:
 - i. Meter reading cost savings;
 - ii. Outage appraisal and restoration of service;
 - iii. System diagnostics; and
 - iv. Availability of real-time customer information.
 - d. An analysis of any undesirable system impacts of AMI, such as radio frequency interference issues, impact to embedded sensitive equipment, early equipment replacement costs, and IT requirements.
 - e. To the extent it relies on experience from other jurisdictions, the analysis should account for unique characteristics of Vermont, including regulatory structure, demographics, growth and development, climate, end uses, and overall kWh consumption levels.
- 2) A utility-by-utility analysis of all benefits and costs of AMI equipment and reliance on advanced time-of-use pricing. However, if information is unavailable and/or where it is not shown that a utility's unique characteristics change the analysis, results from the statewide analysis or relevant parts of that analysis can serve in place of a utility specific analysis:
- a. The analysis could take the form of a general statewide template, created in response to service (1), above, that is refined using specific utility data available from the DPS or gathered from the utilities;
 - b. The selected consultant will assist the DPS in performing initial discovery and/or data gathering in Docket 7307 to determine and assemble the relevant utility and statewide information necessary to conduct the analysis.
 - c. The analysis should enable Vermont utilities and the DPS to determine the appropriateness of AMI installation considering each utility's specific situation.
 - d. The analysis should consider, where appropriate, both full and partial implementation of AMI and advanced time-based rates.⁷
 - e. The analysis should consider the effect of capital investment in AMI on specific utility resources and activities.
- 3) An analysis of Rate Design Policy enabled by advanced metering. Given that rates in Vermont are currently designed to consider issues of embedded resource costs and contracts, as well as long range forward looking costs, and that advanced rate design could represent a significant shift from established rate design principles, the DPS requests that the selected consultant provide recommendations concerning advanced time-of-use pricing enabled by AMI (including "real-time," "critical peak," and other pricing methods), considering:
- a. The established principles of rate design in Vermont;
 - b. Consumer acceptance during the transition to time-based rates and AMI, and best practices to enhance consumer experience;
 - c. Utility Cost recovery;
 - d. Newly established regional markets for capacity and reserves;
 - e. Transition issues, including but not limited to the issue of voluntary versus mandatory time-based rates for residential customers;

⁷For example, the targeting of AMI or advanced time-based rates to certain customer classes.

- f. The extent to which demand response, load reduction, and load shifting can be enabled by advanced time-of-use pricing;
 - g. Inclining block rates to the extent that there are concerns related to the implementation of advanced time-of-use pricing; and
 - h. Integrated Resource Planning, highlighting the implications of advanced metering infrastructure and advanced time-based rates on utilities' long-term energy service and future investment needs, and the implications for long term planning exercises.
- 4) Recommendations, including prescribed implementation mechanisms and timeframes, with respect to:
 - a. Deployment of AMI based on the analysis completed in (1), (2), and (3) above. Specifically, the Department would like recommendations related to pilot programs or accelerated action warranted by potential favorable results in the cost/benefit analysis. In addition, the Department requests recommendations with respect to actions that will maximize an early or previous investment of AMR or AMI technology by Vermont utilities.⁸
 - b. Standards and/or Regulations that could be useful in encouraging AMI and easing any transition to advanced time-based rates.
- 5) A delivered report, in hard copy and electronic form, and presentation that is accessible to the general public, legislature, utility personnel, PSB, and DPS, which contains an analysis of, at a minimum:
 - a. The recommendations and analysis detailed in Sections (1)-(4) above;
 - b. The current status of implementing advanced metering technology and/or advanced metering infrastructure by Vermont utilities and the time-based rates enabled thereby;
 - c. Consumer, Utility, and Regulator experience from other jurisdictions in planning and implementing programs that promote AMI and advanced time-based designs;
 - d. The barriers to implementing smart metering or advanced time-of-use pricing relevant to Vermont;
 - e. The financial risk management products and services, if any, available to utilities considering shifting to advanced time-based rates enabled by investment in AMI;
 - f. Cost-of-service impacts of investments in advanced metering and ancillary equipment, and opportunities to mitigate any rate impacts with responsive rate designs or other methods;
 - g. The supporting equipment, efficiency programs, informational campaigns, and standards and/or requirements necessary to ensure customers are effectively empowered to use and respond to price signals; and

⁸ The DPS is concerned that early adoption of AMR or AMI technology may undermine greater utility and consumer benefits to be realized or enabled from advanced meter infrastructure and advanced rate designs. However, the DPS does not want to slow any utility efforts to deploy AMI by Vermont utilities.

- h. Any other issues that are likely to arise in the context of this investigation, such as potential conflicts AMI and associated advanced time-based rates may have with state law, regulations, or policy.⁹

Up to three (3) informal or formal workshops will likely be held, and the consultants will be expected to offer a presentation of their analysis at these workshops, in person. The first of these workshops is likely to be held soon after the consultant(s) services are contracted; the selected contractor should be prepared to meet with utilities and request data necessary for the first analyses. The consultant(s) should be prepared to provide multiple copies of any written products intended to be filed with the Public Service Board. It is possible that the consultants may have to agree to maintain the confidentiality of certain specified information.

As noted above, the study will take place in the context of a Board investigation, Docket 7307. At the time of this request for proposal, the investigation is not a contested case proceeding. However, if circumstances change, the Board can and will consider modifying the procedure as necessary. The selected consultant must be available to provide services in addition to those specifically outlined in this request, such as providing prefiled testimony, sitting for cross-examination, preparing and answering additional discovery, assisting with the preparation of briefs, and assisting with rulemaking. **All bidders to the RFP must provide a specified rate for these potential additional services in their response to proposal.**

The consultant(s) will be supervised by the DPS Planning Division, with assistance from the Finance and Legal Divisions.

GENERAL REQUIREMENTS

Proposals must include at minimum:

Identification of Organization

State the full name and address of the organization and, if applicable, other subcontractors that will perform, or assist in performing, the work. Include a brief description of the organization history, structure, and size.

Prior Experience Disclosure

Proposals should demonstrate significant, in-depth knowledge of and experience in analysis of AMI and time-based rates and note any previous experience working with utilities and/or utility regulatory agencies in reviewing and/or implementing AMI and time-based rates. Consultant(s) must not be currently employed by any person or company that sells, transmits, or generates electricity in Vermont. Consultant(s) should identify any other potential conflicts of interest and state the reason(s) why the consultant believes they would not detrimentally affect performance of the work requested herein and what steps the consultant will put in place to ensure that such detrimental effect does not occur.

⁹ One such issue that arises in the context of this investigation is the extent to which AMI and associated advanced time-based rates will affect net metering standards and practices. It appears that AMI could enhance net metering programs, but may also require a change in legislation or rules that guide that process.

Personnel

Each organization submitting a proposal under this RFP shall have demonstrable knowledge, skills and experience as it relates to the required work. The proposal must identify all persons that will be employed in the proposed work by skill and qualifications and identify key personnel by name and title and provide a resume for each. Subcontractors must be listed, including the firm name and address, contact person, and complete description of work to be subcontracted. Include descriptive information concerning subcontractor's organization and abilities. References for the lead contractor and any subcontractors included in the proposal should be provided.

Work Plan

Describe in narrative form the plan for accomplishing the tasks outlined in the RFP Scope of Services, including technical approaches and an explanation of why the proposed approach is superior to other approaches.

Indicate the number of hours allocated to each task for each project and which individual will complete the tasks. Also include an explanation of why the number of hours proposed is both necessary and sufficient to complete the task.

Provide statements and discussion of anticipated major difficulties and problem areas, with potential or recommended approaches for their solution.

Include a scheduling proposal and work plan specifying the date upon which the applicant would be ready to commence work, and any other appropriate scheduling of specific tasks. Also provide an explanation of all known or probable scheduling constraints, or limitations on staff availability, within timeframe of the project.

Budget Considerations

Applicants must submit a proposed budget and include narrative explanations. The following cost elements should be included:

- Personnel (position, rate, hours)
- Travel (include mileage rate, lodging, etc.)
- Supplies & Materials
- Other (specify)
- Total Direct Costs
- Indirect Costs (may not exceed 22.94% of direct costs)
- BUDGET TOTAL

Reimbursement for time and materials will be by voucher based upon the actual staff time assigned at the rates provided and upon actual costs incurred based upon documentation acceptable to the Department.

In addition, applicants must submit an hourly billable rate in the event they are needed for testimony, discovery preparation and response, brief preparation, rulemaking assistance, and/or other services to be provided following the completion of and in addition to the scope of services detailed above.

Authorized Negotiators

Include the names and phone numbers of personnel authorized to negotiate the proposed contract with the State. All proposals must be signed by a duly authorized representative of the party (or parties) submitting the proposal.

Additional Information and Comments

Include any other information that is believed to be pertinent, but not specifically requested elsewhere in this RFP.

SELECTION CRITERIA

The DPS will evaluate all proposals received based upon reasonableness of cost, completeness and quality of the proposal, qualifications of the individuals proposed to perform the work, relevance of previous experience, and any other criteria it deems relevant. Acceptance or rejection of any or all proposals will be determined by the exercise of the Department's sole discretion.

All proposals are subject to an evaluation by the DPS and/or non-departmental reviewers. The DPS reserves the right (but in no way is obligated) to interview the top prospective candidates to aid in the selection process.

The award of the contract will be made based on the following criteria:

1. Organization/Project Team
 - Previous involvement in utility matters - especially cases or investigations involving advanced metering infrastructure and associated time-based rates
 - Experience with other types of similar projects
 - Adequate staffing for described work
 - Willingness and ability to work in a flexible and timely manner
2. Work Plan
 - Definition and timeliness of tasks to be performed
 - Strategy to implement the project
 - Financial management, including oversight of any subcontractors
3. Budget
 - Budget line items and amounts are sufficiently described and justified.
 - Budgeted costs and the associated rates used in the setting the proposed budget.

TERMS AND CONDITIONS

1. The DPS reserves the right to reject any and all proposals received as a result of this RFP for any reason, to waive minor irregularities in any proposals received, and to negotiate with any party in any manner deemed necessary to best serve the interests of the State.
2. The DPS shall not be responsible for any costs incurred by any party in preparation of any proposal submitted in response to this RFP.

3. The DPS reserves the right to amend or cancel this RFP at any time if the best interest of the State requires such action.
4. News releases pertaining to this RFP, contract award, or the project shall **not** be made without prior written approval from the DPS.
5. The DPS will pay for actual work performed and expenses incurred under this project up to the specified contract amount. Specific payment provisions will be arrived at upon mutual agreement of the parties. All payments will require the submission of an itemized billing of work performed to date in sufficient detail to justify payment.
6. All parties submitting proposals shall be Equal Opportunity Employers. During the duration of the performance of this contract, the contractor will be expected to comply with all federal, state and local laws respecting non-discrimination in employment.
7. All deliverables submitted by the selected contractor shall become the property of the State.
8. The DPS assumes no liability in any fashion with respect to this RFP or any matters related thereto. All prospective contractors and their subcontractors or successors, by their participation in the RFP process, shall indemnify, save and hold the DPS and its employees and agents free and harmless from all lawsuits, causes of action, debts, rights, judgments, claims, demands, damages, losses and expenses or whatsoever kind in law or equity, known and unknown, foreseen and unforeseen, arising from or out of this RFP and/or any subsequent acts related thereto, including but not limited to the recommendation of a contractor and any action brought by an unsuccessful applicant.
9. Any contract executed with respect to this RFP will contain the State's customary provisions for a contract for services, attached hereto.
10. Parties agree to sign confidentiality agreements concerning specified materials, if necessary.

ATTACHMENT A
CONTRACTS FOR SERVICES
CUSTOMARY STATE CONTRACT PROVISIONS

1. **Entire Agreement:** This contract represents the entire agreement between the parties on this subject matter. All prior agreements, representations, statements, negotiations, and understandings shall have no effect.
2. **Applicable Law:** This contract will be governed by the laws of the State of Vermont.
3. **Appropriations:** If this contract extends into more than one fiscal year by the State (July 1 to June 30), and if appropriations are insufficient to support this contract, the State may cancel at the end of the fiscal year, or otherwise upon the expiration of existing appropriations authority.
4. **No employee benefits for Contractor:** The Contractor understands that the State will not provide any individual retirement benefits, group life insurance, group health and dental insurance, vacation and sick leave, workers' compensation or other benefits or services available to State employees, nor will the State withhold any federal or state taxes. The Contractor understands that all tax returns required by the internal revenue code and the state of Vermont, including but not limited to income, withholding, sales and use, and rooms and meals, must be filed by the Contractor, and information as to contract income will be provided by the State of Vermont to the Internal Revenue Service and the Vermont Department of Taxes.
5. **Independence, Liability:** The Contractor will act in an independent capacity and not as officers or employees of the State. The Contractor shall indemnify, defend, and save harmless the State and its officers and employees from liability and any claims, suits, judgements and damages arising as a result of the Contractor's performance of this contract.
6. **Insurance:** Before commencing work on this contract the contractor must provide certificates of insurance to show that the following minimum coverages are in effect. It is the responsibility of the contractor to maintain current certificates of insurance on file with the State through the term of the contract.

Workers Compensation: With respect to all operations performed, the contractor shall carry workers compensation insurance in accordance with the laws of the State of Vermont.

General Liability and Property Damage: With respect to all operations performed under the contract, the Contractor shall carry general liability insurance having all major divisions of coverage including, but not limited to:

Premises – Operations
Independent Contractors' Protective
Products and Completed Operations
Personal Injury Liability
Contractual Liability

The policy shall be on an occurrence form and limits shall not be less than:

\$1,000,000 Per Occurrence
\$1,000,000 General Aggregate
\$1,000,000 Products/Completed Products Aggregate
\$ 50,000 Fire Legal Liability

Automotive Liability: The Contractor shall carry automotive liability insurance covering all motor vehicles, including owned, non-owned, and hired, used in connection with the contract, limits of coverage shall not be less than \$1,000,000 combined single limit.

No warranty is made that the coverages and limits listed herein are adequate to cover and protect the interests of the contractor for the contractor's operations. These are solely minimums that have been set to protect the interests of the State.

7. **Reliance by the State on Representations:** All payments by the State under this contract will be made in reliance upon the accuracy of all prior written representations by the Contractor, including but not limited to bills, invoices, progress reports and other proofs of work.
8. **Records Available for Audit:** The Contractor will maintain all books, documents, payrolls, papers, accounting records and other evidence pertaining to costs incurred under this agreement and make them available at reasonable times during the period of this contract and for three years thereafter for inspection by any authorized representatives of the State or Federal government. If any litigation, claim, or audit is started before the expiration of the three year period, the records shall be retained until all litigation, claims or audit findings involving the records have been resolved. The State, by any authorized representative, shall have the right at all reasonable times, to inspect or otherwise evaluate the work performed or being performed under this contract.
9. **Fair Employment Practices and Americans with Disabilities Act:** Contractor agrees to comply with the requirements of Title 21 VSA Chapter 5, Subchapter 6, relating to fair employment practices, to the full extent applicable. Contractor shall also ensure, to the full extent required by the Americans with Disabilities Act of 1990, that qualified individuals with disabilities receive equitable access to the services, programs, and activities provided by the Contractor under this contract. Contractor further agrees to include this provision in all subcontracts.
10. **Set Off:** The State may set off any sums which the contractor owes the State against any sums due the contractor under this contract; provided, however, that any set off of amounts due the State of Vermont as taxes shall be in accordance with the procedures more specifically provided hereinafter.
11. **Taxes Due to the State:**
 - a. Contractor understands and acknowledges responsibility, if applicable, for compliance with State tax laws, including income tax withholding for employees performing services with the State, payment of use tax on property used within the State, corporate and/or personal income tax on income earned within the State.
 - b. Contractor certifies under the pains and penalties of perjury that, as of the date the contract is signed, the contractor is in good standing with respect to, or in full

compliance with, a plan to pay, any and all taxes due the State of Vermont.

- c. Contractor understands that final payment under this contract may be withheld if the Commissioner of Taxes determines that the Contractor is not in good standing with respect to or in full compliance with a plan to pay any and all taxes due to the State of Vermont.
- d. Contractor also understands the State may set off taxes (and related penalties, interest and fees) due to the State of Vermont, but only if the contractor has failed to make an appeal with the time allowed by law, or an appeal has been taken and finally determined and the Contractor has no further legal recourse to contest the amounts due.

12. **Child Support:** (Applicable if the Contractor is a natural person, not a corporation or partnership). Contractor states that, as of the date the contract is signed, he/she:

- a. is not under any obligation to pay child support; or
- b. is under such an obligation and is in good standing with respect to that obligation; or
- c. has agreed to a payment plan with the Vermont Office of Child Support Services and is in full compliance with that plan.

Contractor makes this statement with regard to support owed to any and all children residing in Vermont. In addition, if the Contractor is a resident of Vermont, Contractor makes this statement with regard to support owed to any and all children residing in any other state or territory of the United States.

13. **Subcontractors:** The Contractor shall not assign or subcontract the performance of this agreement or any portion thereof to any other contractor without the prior written approval of the State. Contractor also agrees to include in all subcontract agreements a tax certification in form substantially identical to paragraph 11 above.
14. **No Gifts or Gratuities:** Contractor shall not give title or possession of any thing of substantial value (including property, currency, travel and/or education programs) to any officer or employee of the State during the term of this contract.
15. **Copies:** All written reports prepared under this contract will be printed using both sides of the paper.

ATTACHMENT B

Department of Public Service request to Public Service Board to open Investigation

STATE OF VERMONT
PUBLIC SERVICE BOARD

Petition of the Department of Public Service
for an Investigation into the Use of Smart Metering
and Time-Based Rates

Docket No. _____

PETITION

The Vermont Department of Public Service ("Department" or "DPS"), pursuant to 30 V.S.A. § 2(c), petitions the Public Service Board (the "Board") to open an investigation pursuant to 30 V.S.A. §§ 2(c), 209(a), and 218(b) for the purpose of considering the costs and benefits of "smart metering" and increased use of time-based rates and the potential promulgation of standards and requirements with respect to same. In support of its petition the Department states as follows:

1. The use of "smart" metering equipment – meaning metering equipment that is capable at least of sending two-way signals and supporting advanced time-based rates – and the use of such rates, including but not necessarily limited to time-of-use pricing during periods of critical peaks or hourly differentiated time-of-use pricing, have the potential, either in combination or separately, to provide numerous important benefits to Vermont electric consumers and utilities.

2. These potential benefits include, but are not necessarily limited to, allowing the creation of rate designs that send more accurate price signals, enabling the shifting of load away from critical peaks, reducing energy use, reducing meter reading costs, and enabling improvements and cost reductions in responding to customer outages.

3. Experience in other jurisdictions suggests substantial reductions in demand from pricing plans enabled through advanced time-of-use meters. This demand reduction generally corresponds to peak periods when both utility costs are high and when greenhouse gas emissions and other emissions are high. Advanced time-of-use pricing holds the potential for both lower costs and improved environmental profile for the electric utility sector.

4. The potential benefits of "smart" metering equipment also include more and better information about customer resource requirements for utility planners and the flow of information to the ultimate customer for empowerment.

5. Some Vermont utilities are deploying Advanced Meter Reading ("AMR") technologies that center on meter reading benefits and associated cost reductions. However, the more Advanced Meter Infrastructure ("AMI") holds the potential for a much longer list of potential benefits and greater overall

value for ratepayers. Early deployment of the AMR technology may undercut important ratepayer benefits from the more advanced AMI meter technologies.

6. The Board should conduct a docketed investigation of the opportunities for Vermont electric utilities cost-effectively to install advanced “smart” metering equipment sufficient to support advanced time-of-use pricing and for those utilities to utilize advanced time-of-use pricing. The scope of the investigation should at include least the following:

- a. The current status of implementing either advanced time-of-use rate designs or advanced metering by Vermont utilities.
- b. Analysis of experience from other state jurisdictions and individual utility experience in planning and implementing programs that promote advanced time-of-use rate designs or advanced metering.
- c. Opportunities for exploring ways to design pilot programs and share experience among Vermont utilities with the deployment of advanced meters and rate designs.
- d. Analysis of all costs and benefits of installing advanced metering equipment, giving due consideration to the circumstances that differentiate Vermont utilities.
- e. Analysis of opportunities for reducing short - and long-term rates or mitigating rate impacts of investments in advanced metering and ancillary equipment through advanced time-of-use rate designs enabled by these investments.
- f. Analysis of constraints or barriers to implementing smart metering or advanced time-of-use pricing, or opportunities presented by further deferring plans or commitments toward advanced metering equipment or rates.
- g. Analysis of the supporting and ancillary equipment, equipment standards, and efficiency programs necessary to ensure that customers are adequately and effectively empowered to use and respond cost-effectively to price signals made possible through advanced metering equipment.
- h. Consideration of whether to issue relevant statewide standards or requirements, either through rulemaking or order in the investigation requested herein, as appropriate.
- i. Consideration of whether, after investigation, in utility territories where the Board concludes it appropriate and cost-effective, to require each such Vermont utility to file plans for investment and deployment of appropriate technologies and plans and strategies for implementing advanced pricing with a goal of ensuring that all ratepayer classes have an opportunity to receive and participate effectively in advanced time-of-use pricing plans.

7. The Department requests that the Board open the investigation by convening a prehearing conference and identifying the parties. The Board should make each retail electric distribution utility a party and invite the Vermont Electric Power Company, Inc. and Vermont Transco, LLC (collectively "VT Transco") to participate. The Department requests that, following the prehearing conference, the Board allow a period for DPS to conduct an analysis and study addressing at least the topics listed in paragraph 6a through 6h, above. Once complete, the study would be presented to the Board and parties through a technical workshop. A second workshop would then be held at which DPS and other parties would present and discuss recommendations for specific substantive actions that they believe the Board should undertake. Following that second workshop, the Board would conduct such further proceedings as may be necessary and appropriate to consider the parties' recommendations and resolve any conflicts. The specific procedures to be utilized at that stage – whether rulemaking, contested case process, or other procedures – may depend on the nature of the action or actions that parties request the Board to take.

8. DPS requests that the Board undertake an investigation with the above-described scope regardless of whether any pending legislation becomes law. However, as the Board is aware, pending H.520 contains provisions calling for an investigation similar to the one requested herein and for the Board to consider use of inclining block rates. If H.520 or other legislation passes this year containing such or similar provisions, then the scope of the investigation requested herein should be expanded to include: (a) any other inquiries related to smart metering or time-based rates that are specified in the final version of the legislation and
(b) any Board consideration of inclining block rates that the legislation may require.

WHEREFORE, the Department respectfully requests that the Board open a docketed investigation consistent with the foregoing, and proceed to conduct such prehearing conferences, workshops, or hearings as are needed to conduct such investigation.

Respectfully submitted on this 6th day of April, 2007.

VERMONT DEPARTMENT OF PUBLIC SERVICE

By: _____
Aaron Adler, Special Counsel

cc: Vermont distribution utilities
VT Transco